more interactive controllers are provided on a multimedia message presentation interface in which number of forms are provided. The interactive controllers may be an submit button for an order form, a radio button, a check box, a text, a text field, a list box, an option menu and etc. Each of the controllers can be designated a name. When a form is submitted, the name and current value of a specific controller can be sent together with the form. By embedding controllers into the multimedia message, the user can express his or her preference to the service application program by means of these interactive controllers, to provide an interactive solution.

[0044] Now the reference is made to FIG. **6**, which shows logic modules of the interactive controllers according to an embodiment of the present invention.

[0045] The present embodiment supports multimedia items throughout extending interactive controllers. The supported multimedia items may be image, audio and video. The items of the radio button, the check box, the list box and the option menu maybe pictures, audio and video clips. Taken the option menu for example, the items of the option menu could be pictures. Each picture represents an item. Take the multimedia options menu shown in FIG. **7** as an example. In FIG. **7** models of Nokia handsets, for example Nokia2110, Nokia5110, Nokia6110, Nokia7250 etc and pictures of the respective models of handsets are illustrated. The user can, for example, click a handset picture for one of the various models, and the handset of this model is displayed on the display screen of the user terminal, MMS terminal **100**. The user can also move the slide box to display more Nokia models of handsets and pictures.

[0046] Hereafter descriptions will be given to the relationship between the interactive controllers proposed by an embodiment of the present invention. Logic modules are adopted to define relationships and actions. The relationship between the interactive controllers includes two kinds of relationships, namely LINK and CONTAIN. For example, if a LINK relationship exists between two or more interactive controllers, when one of the controller items is selected, all of others are selected too. Consequently, when one of the controller items is displayed, all of others are displayed or played too. As it is shown in FIG. **6**, when the model of a handset is changed from Nokia 5100 to Nokia7250, for every model of handsets their pictures and prices are changed in consequent respectively. CONTAIN is another relationship. For example, if the item **1** of the controller A contains items **1** through **7** of the controller B, when item **1** of the controller A is selected, only items **1** through **7** of the controller B can be selected.

[0047] According to an embodiment of the present invention, firstly the existing MMS system is extended to display a richer dynamic form on the user terminal wherein the displayed individual controller have certain association, preferably the relationship between controllers are defined as LINK relations or CONTAIN relations, to facilitate the user to operate on the displayed multimedia message, such that a convenient means for the interaction between the subscriber and the back end systems is provided. A user can select and input his or her preference by means of these interactive controllers, and the interactive controllers designed according to the present invention can automatically generate a response message based on the user's choice. The user pushes the order form submit button, and a response message is generated and sent out. For example, a response message, which contains an order request i.e. an order form, is generated automatically, and sent to the server. A common solution is provided to message servers/users to generate/operate on value added services by means of extending the MMS system. A very friendly user interface of the MMS message is provided to the user by means of using these interactive controllers. When the user selects different parameters, the message is displayed with a different presentation structure. In this manner, the user can accomplish a local interaction or an interaction with a message server.

[0048] The extending of the existing MMS system according to an embodiment of the present invention is realized by embedding XForms technology into MMS presentation language. The current MMS standard is extended to enhance the interaction capability for the MMS message. The XForms is extended to support the multimedia interactive controllers. The relationship between the controllers is described by means of a XML based document. For example, the relation description is named Relationship XML (RXML). And a MMS middleware system is introduced to process the interactive multimedia message service.

[0049] XForms is an XML-based language, which defines form based interaction interfaces. XForms is a renewal of the HTML form composed in the HTML language. XForms provides an extendable method to contain richer and more dynamic forms in the HTML file. By splitting a conventional HTML form into three parts, namely data model, exemplary data and user interface. The presentation is separated from the content, so a multiplex is allowed and more powerful input function is available. XForms and XMIL are all XML based languages. XForms can be integrated into SMIL. XForms provides various kinds of interactive controllers including a submit button, a radio button, a check box, a text, a text field, a list box, an option menu and etc.

[0050] These interactive controllers are extended to support multimedia related objects. The present embodiment supports multimedia items through extending interactive controllers. The items of the radio button, the check box, the list box and the option menu may be pictures, audio and video clips. Taking the option menu for example, an item of the menu is a picture. Each picture represents an item.

[0051] The relationship between the interactive controllers is described in XML language. According to an embodiment of the present invention the relationships between the interactive controllers are defined as two kinds of relationships. They are LINK and CONTAIN relations. The most commonly used relation is the LINK relation. For example, if there is a LINK relationship between two or mole interactive controllers, when one of the controller items is selected all the other are selected too. Consequently, when one of the controller items is displayed all the rest items are displayed or played at the same time. CONTAIN means that, if the item **1** of the controller A comprises items **1** through **7** of the controller B, when item **1** of the controller A is selected, only items **1** through **7** of the controller B are selected.

[0052] Hereafter the relationships between the controllers are further explained by means of examples.

[0053] Taking motorcycle shopping for an example, when a user receives a motorcycle promotion message (refer to